

Split -

ASAP

Work Order ID 146146-1

146146

Friday, May 06, 2016 11:32:51 AM

Item ID: D3256-1 Accept *N900040100* Setup Start *NS1*
Revision ID: POSITIVE RECALL Stop *NS2*
Item Name: Panel
Start Date: 5/6/2016 Start Qty: 1.00 *1* Cust Item ID:
Required Date: 5/10/2016 Req'd Qty: 1.00 *1* Customer:
Reference:

Approvals: Process Plan: MKF Date: 16-5-5 Tooling: Date: Run Start *NR1*
QC: Date: SPC (Y/N): Date: Stop *NR2*

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
Draw Nbr	Revision Nbr								
D3256	E Custom								
100	FLOW WATER JET	0.00							
100									
Waterjet	Memo	0.09							
FLOW CNC Waterjet	1-Cut as per Dwg D3256								
	Dwg Rev:								
	Prog Rev:								
	2-Deburr if necessary								
110	QC2- Inspect parts off machine FAI/FAIB	0.00							
110									
QC	Memo	0.01							
Quality Control									
120	QC8- Inspect parts - second check	0.00							
120									
QC	Memo	0.02							
Quality Control									

DAS
22
9-89

1605.00

auto, see attached email
mk
16-5-5

6

26/05/09

6

26/05/09

6

DAS
38
9-89

MAY 10 2016

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Page 2

[illegible]

Work Order ID 146146

Friday, May 06, 2016 11:32:51 AM

146146

Page 3

Item ID: D3256-1

Accept

N900040100Setup Start ***NS1***

Revision ID:

Stop ***NS2***

Item Name: Panel

Start Date: 5/6/2016 Start Qty: 1.00 ***1***

Cust Item ID:

Required Date: 5/10/2016 Req'd Qty: 1.00 ***1***

Customer:

Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____

Run Start ***NR1***

QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
160	QC21- Final Inspection - Work Order Release	0.00							
160									
QC	Memo	0.10							
Quality Control									

MCS MAY 10 2016
~~MCS MAY 10 2016~~

MCS MAY 10 2016

POSITIVE RECALL

EFFECTIVE _____ AUTH _____

RELEASED _____ DATE _____

Picklist Print

Friday, May 06, 2016 11:32:51 AM

Page 1

Work Order ID: 146146

146146

Parent Item: D3256-1

D3256-1

Parent Item Name: Panel

Start Date: 5/6/2016

Required Date: 5/10/2016

Start Qty: 1.00

Required Qty: 1.00

Comments: IPP Rev:A New Issue 07-09-28 EC verified by:DD
IPP Rev:b ECN 1052 07-10-31 DD verified by:EC

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
M304S22GA		Purchased	No			100	sf	143.8750	0.987	1.038947			

M304S22GA

304/316 .032 Sheet

**

2c 16/05/09

Location

Loc Qty

Loc Code

MAT020

143.875

m126593

28.475

m131999

51.4

m134399

64

8.8

DQA: _____ Date: _____

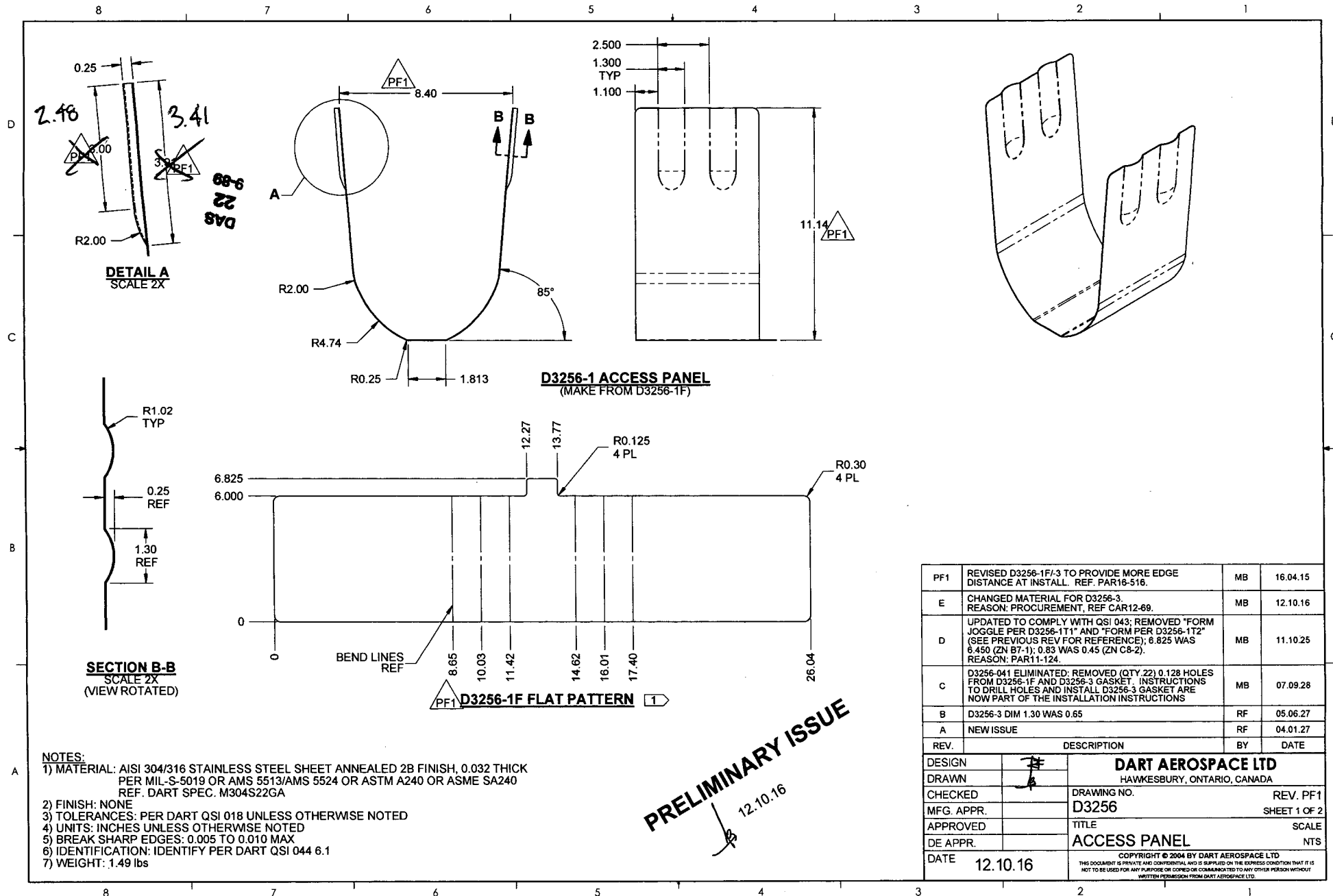


WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐			
Date : _____	Step #: _____	QTY Effective : _____		MRB (QS1042) Approval	
Description Work Order Deviation		Disposition		Completed By	
				Lead hand / Supervisor Approval Verification	
				QC / QA Coordinator Approval	
Root Cause		FAULT CATEGORY			
Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐	Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐	Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Misabeled ☐ Fit/Function ☐ Misaligned/off center ☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐			
OTHER : _____					



PF1	REVISED D3256-1F/3 TO PROVIDE MORE EDGE DISTANCE AT INSTALL. REF. PAR16-516.	MB	16.04.15
E	CHANGED MATERIAL FOR D3256-3. REASON: PROCUREMENT, REF CAR12-69.	MB	12.10.16
D	UPDATED TO COMPLY WITH QSI 043; REMOVED "FORM JOGGLE PER D3256-1T1" AND "FORM PER D3256-1T2" (SEE PREVIOUS REV FOR REFERENCE); 6.825 WAS 6.450 (ZN B7-1); 0.83 WAS 0.45 (ZN C8-2). REASON: PAR11-124.	MB	11.10.25
C	D3256-041 ELIMINATED; REMOVED (QTY 22) 0.128 HOLES FROM D3256-1F AND D3256-3 GASKET. INSTRUCTIONS TO DRILL HOLES AND INSTALL D3256-3 GASKET ARE NOW PART OF THE INSTALLATION INSTRUCTIONS	MB	07.09.28
B	D3256-3 DIM 1.30 WAS 0.65	RF	05.06.27
A	NEW ISSUE	RF	04.01.27
REV.	DESCRIPTION	BY	DATE
DESIGN			
DRAWN			
CHECKED			
MFG. APPR.			
APPROVED			
DE APPR.			
DATE	12.10.16		
DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA			
DRAWING NO. D3256		REV. PF1 SHEET 1 OF 2	
TITLE ACCESS PANEL		SCALE NTS	
COPYRIGHT © 2004 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.			

DQA: _____ Date: _____



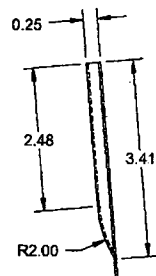
WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

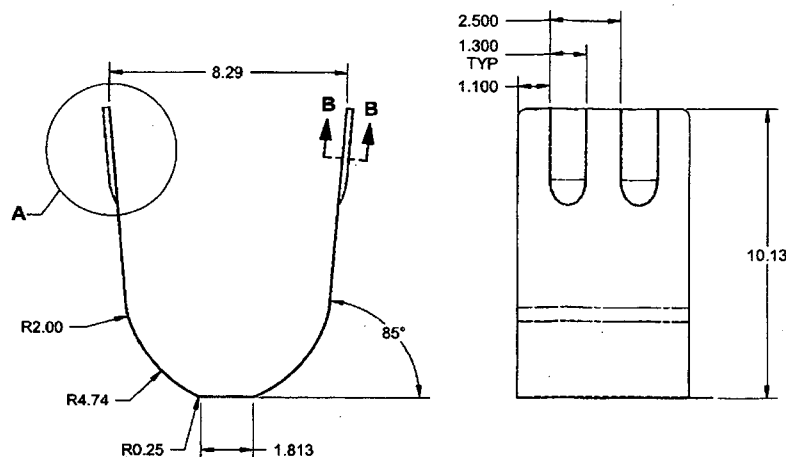
Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :			MRB (QS1042) Approval Completed By Lead hand / Supervisor Approval Verification QC / QA Coordinator Approval		
Description Work Order Deviation				Disposition					

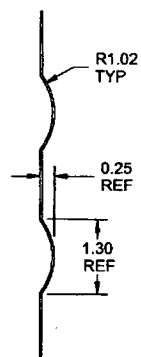
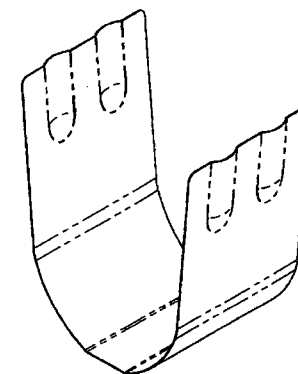
Root Cause			FAULT CATEGORY							
Environment ☐	☐	No Re-verification	☐	Pressure/Forced	☐	Temperature/Cure	☐	Power Loss/Surge	☐	Positioned Wrong
Design ☐	☐	Operator	☐	Bending	☐	Set-up	☐	Folio/Program	☐	Outside Dimensions
Doc/Data ☐	☐	Offset/Setup	☐	Centre Not Concentric	☐	BOM/Route	☐	Grain	☐	Over/Under tolerance
Equip/Tooling ☐	☐	Supplier	☐	Cracks	☐	Broken/Damage/Defect	☐	Weld	☐	Part Incorrect
Handling/Pre ☐	☐	Training	☐	Crimp/Kink/Ripple/Wave	☐	Inspection Incomplete/Unqualified	☐	Wrong Stock Pulled	☐	Part Lost/Missing
Material ☐	☐	Use for Testing	☐	Cuffs	☐	Contamination	☐	Out of Sequence	☐	Part Moved
Internal Transport ☐	☐	Poor Information	☐	Crushing	☐	Countersink	☐	Off-set	☐	Drawing
Tribal Knowledge ☐	☐	Rushing	☐	Heat Treat	☐	Cut Too Short	☐	Mislabeled	☐	Finish
LOA ☐	☐	Product Improvement	☐	Wave/Twist in Tube	☐	Instructions Incomplete/Unclear	☐	Fit/Function	☐	Misread
Substation ☐	☐	Process Improvement	☐	Marks/Chatter	☐	Drill Holes	☐	Misaligned/off center	☐	Turning Sequence
Past Expiry Date ☐	☐	Manufacturing Process	OTHER : _____							
Misidentified ☐	☐	Past Due								



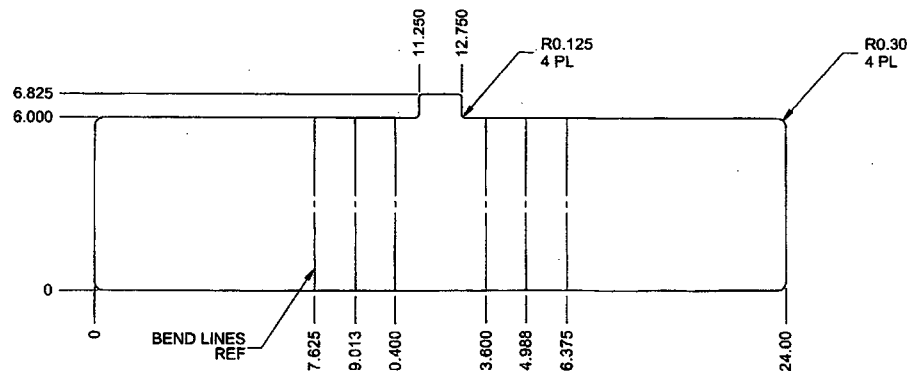
DETAIL A
SCALE 2X



D3256-1 ACCESS PANEL
(MAKE FROM D3256-1F)



SECTION B-B
SCALE 2X
(VIEW ROTATED)



D3256-1F FLAT PATTERN

RELEASED
2012-11-06

NOTES:

- 1) MATERIAL: AISI 304/316 STAINLESS STEEL SHEET ANNEALED 2B FINISH, 0.032 THICK
PER MIL-S-5019 OR AMS 5513/AMS 5524 OR ASTM A240 OR ASME SA240
REF. DART SPEC. M304S22GA
- 2) FINISH: NONE
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: IDENTIFY WITH DART P/N "D3256-1" AND B/N "BXXXXX" PER DART QSI 044 6.1 (FINE POINT PAINT MARKER)
- 7) WEIGHT: 1.37 lbs

E	CHANGED MATERIAL FOR D3256-3. REASON: PROCUREMENT, REF CAR12-68.	MB	12.10.16
D	UPDATED TO COMPLY WITH QSI 043; REMOVED "FORM JOGGLE PER D3256-1T1" AND "FORM PER D3256-1T2" (SEE PREVIOUS REV FOR REFERENCE); 6.825 WAS 6.450 (ZIN B7-1); 0.83 WAS 0.45 (ZIN CB-2). REASON: PAR11-124.	MB	11.10.25
C	D3256-041 ELIMINATED; REMOVED (QTY.22) 0.128 HOLES FROM D3256-1F AND D3256-3 GASKET. INSTRUCTIONS TO DRILL HOLES AND INSTALL D3256-3 GASKET ARE NOW PART OF THE INSTALLATION INSTRUCTIONS	MB	07.09.28
B	D3256-3 DIM 1.30 WAS 0.65	RF	05.06.27
A	NEW ISSUE	RF	04.01.27
REV.	DESCRIPTION	BY	DATE
DESIGN	<i>[Signature]</i>	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA DRAWING NO. D3256 TITLE ACCESS PANEL SCALE NTS COPYRIGHT © 2004 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.	
DRAWN	<i>[Signature]</i>		
CHECKED	<i>[Signature]</i>		
MFG. APPR.	<i>[Signature]</i>		
APPROVED	<i>[Signature]</i>		
DE APPR.	<i>[Signature]</i>		
DATE	12.10.16		

Melanie Fauteux

From: Marc Bellavance
Sent: Friday, May 06, 2016 11:22 AM
To: Melanie Fauteux
Cc: Shirley Hay; Denis Maranda; Sian Willems
Subject: FW: Supporting Bell Helicopter
Attachments: D3256-1_RevPF1.pdf; D3256-1F_RevPF1.dxf; D3256-3 RevE_CUSTOM.pdf; D3256-3 RevE_CUSTOM.dxf; D3206_RevPB1.pdf; D3206-3F_RevPB1.dxf

Importance: High

Hi Mel,

As discussed, please see below.

Also:

1. Just got off the phone with Bell and D412-705-015 should be put under review and any WIP on hold if not done already. This kit is not working on Bell 412 EPI and tweaks are required. As a result, Bell would now need:
 - Qty(1) D3256-1 per attached drawing and DXF.
 - Qty(2) D3256-3 per attached drawing and DXF.
 - This would ensure they can complete ships 1 and 2. Based on this, other 5 kits would need to be amended accordingly but this is still TBD.
2. D412-704-015 Kit: some tweaks required for fit on Bell 412 EPI. Next revision of this kit will add D3206-3. We have already provided them with qty(1) on prelim and they confirm resolution of the issue (SO125967). They have 7 ships so we would need to make qty(6). If possible, qty(1) required for next week. Drawing and DXF attached.

Same as recently, I would be delivering the parts. Next visit is scheduled for May 10 but I don't mind pushing it back to May 13.

Please let me know what is possible to do here. If a meeting is required then please let's have one. ☺

Thanks,
Marc

From: Marc Bellavance
Sent: May-06-16 8:44 AM
To: Denis Maranda <dmaranda@dartaero.com>
Cc: Sian Willems <swillems@dartaero.com>; Patrick Smith <psmith@dartaero.com>
Subject: FW: Supporting Bell Helicopter
Importance: High

Hi Denis,

I will have to put a no charge in our system for this; please advise.

Thanks,
Marc

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :				MRB (QSI042) Approval	
Description Work Order Deviation				Disposition				Completed By Lead hand / Supervisor Approval Verification QC / QA Coordinator Approval	
Root Cause		FAULT CATEGORY							
Environment ☐	☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐			
Design ☐	☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐			
Doc/Data ☐	☐	Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐			
Equip/Tooling ☐	☐	Supplier ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐			
Handling/Pre ☐	☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐			
Material ☐	☐	Use for Testing ☐	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐			
Internal Transport ☐	☐	Poor Information ☐	Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐			
Tribal Knowledge ☐	☐	Rushing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐			
LOA ☐	☐	Product Improvement ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐			
Substation ☐	☐	Process Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐			
Past Expiry Date ☐	☐	Manufacturing Process ☐	OTHER :						
Misidentified ☐	☐	Past Due ☐							

From: Marc Bellavance
Sent: May-05-16 2:40 PM
To: Denis Maranda <dmaranda@dartaero.com>
Cc: Sian Willems <swillems@dartaero.com>; Patrick Smith <psmith@dartaero.com>
Subject: Supporting Bell Helicopter
Importance: High

Hi Denis,

Following my visit to Bell last week, work continued on the D3256-1/-3 we provided them with. However, it was brought to my attention that they have scrapped D3256-3 Gasket while trying to install it on the aircraft. Bell was asking for a "blank" version which they could trim as required. See attached what the custom part would look like.

Sian agreed to the replacement at no charge. We would also require a second blank part for our own reverse engineering purposes. My next visit to Bell is scheduled for the morning of Tuesday, May 10.

Does this give you enough time to have the part manufactured?

Marc Bellavance
Mechanical Designer / Technical Support

DART AEROSPACE
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F 1 613 632 9311
S marcbellavance
www.dartaerospace.com



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DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

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Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐																																																													
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Misidentified ☐	Past Due ☐																																																																

INSPECTION SHEET

DAS
38
9-89

MAY 10 2016

Date:Revised by
KJ

